

Application No.: 10/664,708  
Docket No.: TK3690USNA

Page 2

Amendment to Claims

**In the claims:**

1. (Currently Amended) A nonwoven fabric comprising a support web and a fibrous barrier web consisting of continuous fibers having diameters of less than 1.0 micrometer, optionally coated with a hydrophobic material, having a hydrohead of between about 145 cm and about 400 cm and a Frazier permeability of between about 0.3 m<sup>3</sup>/m<sup>2</sup>-min and about 11.2 m<sup>3</sup>/m<sup>2</sup>-min.
2. (Currently Amended) A nonwoven fabric comprising at least one support web and a hydrophobic barrier web consisting of continuous fibers optionally coated with a hydrophobic material having diameters of less than 2.0 micrometers 1.0 micrometer, a hydrohead of between about 145 cm and about 400 cm and a Frazier permeability of between about 0.3 m<sup>3</sup>/m<sup>2</sup>-min and about 11.2 m<sup>3</sup>/m<sup>2</sup>-min.
3. (Canceled).
4. (Original) The nonwoven fabric of claims 1 or 2, wherein said barrier web fibers have diameters of less than 0.5 micrometer.
5. (Currently Amended) The nonwoven fabric of claim 3 claims 1 or 2, wherein the barrier layer basis weight is between about 5 and 51 g/m<sup>2</sup>.
6. (Previously Presented) The nonwoven fabric of claim 4, wherein the barrier layer has a basis weight of between about 13 and 51 g/m<sup>2</sup>.
7. (Original) The nonwoven fabric of claims 1 or 2, wherein said barrier web comprises nanofibers of hydrophobic polymer or copolymer.
8. (Original) The nonwoven fabric of claim 7, wherein said hydrophobic polymer or copolymer is a polyolefin, a partially fluorinated polymer or a perfluorinated polymer.
9. (Original) The nonwoven fabric of claim 8, wherein said hydrophobic polymer or copolymer has repeating units derived from ethylene, propylene, butenes, hexenes, octenes, styrenes, 4-methylpentene-1 and combinations thereof.
10. (Previously Presented) The nonwoven fabric of claims 1 or 2, wherein said barrier web is rendered hydrophobic by coating with said hydrophobic coating.
11. (Original) The nonwoven fabric of claim 10, wherein said hydrophobic coating is a fluorocarbon coating material.

Application No.: 10/664,708  
Docket No.: TK3690USNA

Page 3

12. (Original) The nonwoven fabric of claims 1 or 2, wherein the barrier web has a maximum pore size between fibers of no more than about 23 micrometers.
13. (Original) The nonwoven fabric of claims 1 or 2, wherein the barrier web has a solids fraction of no less than about 0.03.
14. (Currently Amended) A nonwoven barrier fabric comprising a fibrous barrier web consisting of continuous fibers having diameters of less than 1.0 micrometer, optionally coated with a hydrophobic material, said fabric having a hydrohead of between about 145 cm and about 400 cm and a Frazier permeability of between about 0.3 m<sup>3</sup>/m<sup>2</sup>-min and about 11.2 m<sup>3</sup>/m<sup>2</sup>-min and having a relationship between barrier web basis weight, and fabric hydrohead and Frazier permeability described by the formula:

$$B_{wt}(g/m^2) \leq \frac{4000 \cdot c \cdot (1 - 2.3 \cdot c) \cdot \rho_f}{Frazier \cdot Hydrohead^{k(c)}}, \quad \text{wherein}$$

$\rho_f$  is the density of the barrier fibers, kg/m<sup>3</sup>  $c$  is the solids volume fraction of the barrier web,

$$k(c) = 3.58 \cdot c^2 - 1.32 \cdot c + 1.77,$$

Frazier is in units of m<sup>3</sup>/m<sup>2</sup>-min, and

Hydrohead is in units of centimeters of water column.

15. (Previously Presented/Withdrawn) A nonwoven fabric according to one of claims 1, 2 or 14, comprising a structure of fine fiber/mSB, wherein fine fiber is a barrier web.
16. (Previously Presented) A nonwoven fabric according to one of claims 1, 2 or 14, comprising a structure of fine fiber /SB, wherein fine fiber is a barrier web.
17. (Previously Presented/Withdrawn) A nonwoven fabric according to one of claims 1, 2 or 14, comprising a structure of mSB/fine fiber/mSB, wherein fine fiber is a barrier web.
18. (Previously Presented/Withdrawn) A nonwoven fabric according to one of claims 1, 2 or 14, comprising a structure of fine fiber /MB/SB, wherein fine fiber is a barrier web.
19. (Previously Presented /Withdrawn) A nonwoven fabric according to one of claims 1, 2 or 14, comprising a structure of SB/MB/fine fiber/MB/SB, wherein fine fiber is a barrier web.

Application No.: 10/664,708  
Docket No.: TK3690USNA

Page 4

20. (Previously Presented /Withdrawn) A nonwoven fabric according to one of claims 1, 2 or 14, comprising a structure of fine fiber /MB/mSB, wherein fine fiber is a barrier web.
21. (Previously Presented /Withdrawn) A nonwoven fabric according to one of claims 1, 2 or 14, comprising a structure of mSB/MB/fine fiber/MB/mSB, wherein fine fiber is a barrier web.
22. (Previously Presented /Withdrawn) A nonwoven fabric according to one of claims 1, 2 or 14, comprising a structure of SB/MB/fine fiber /SB, wherein fine fiber is a barrier web.
23. (Original) A nonwoven fabric of claims 1 or 2, wherein said support web comprises fibers having diameters less than about 20 times the barrier web fiber diameters.
24. (Original) The nonwoven fabric of claim 23, wherein said support web fibers have diameters less than about 13 micrometers.